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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,552	12/28/2005	Hitoshi Nagahama	1247-0541PUS1	8217

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EXAMINER	
EVANS, GEOFFREY T	
ART UNIT	**PAPER NUMBER**
2852	

NOTIFICATION DATE	DELIVERY MODE
07/09/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/562,552	NAGAHAMA ET AL.	
	Examiner	Art Unit	
	Geoffrey T. Evans	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 28 December 2005.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 28 December 2005 is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/28/05, 9/27/06, 2/22/07
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuda (2003-354114), in view of Iguchi (08-339115).

Regarding claim 1, and claims 2-8 depending therefrom, Tsuda discloses a developer container comprising: a cylindrical container main body (1, see [0022]) for containing a developer for use in image formation, the developer container being detachably mounted on an image forming apparatus, the container main body being rotated about an axis thereof by driving means provided in the image forming apparatus to supply the developer to the image forming apparatus, the container main body having: a discharge hole (2a; see [0022]), for discharging the developer, and conveying means in an inner circumferential portion of the container main body, for conveying the developer in the axial direction when the container main body is rotated about the axis, the conveying means having a plurality of conveying portions extending in an extending direction from one end portion to the other end portion in the axial direction as it is directed to a downstream side in a rotation direction (see [0023]), the conveying portions being formed at intervals in a circumferential direction thereof and the axial direction, of which adjacent two conveying portions in the axial direction being arranged in such a manner that an end portion on a downstream side in the rotation direction of

one conveying portion and an end portion on an upstream side in the rotation direction of the other conveying portion adjoin each other in the axial direction (see figure 1).

Tsuda does not disclose the discharge hole being substantially on the middle portion of the container main body in an axial direction.

Iguchi discloses a discharge hole being substantially on the middle portion of the container main body in an axial direction (see [0014])

It would have been obvious to one of ordinary skill in this art at the time the invention was made, to modify the developer container of Tsuda by putting the discharge hole being substantially on the middle portion of the container main body in an axial direction, since the developer would not have to be conveyed as far, and developer container volume could be saved since smaller conveying grooves would be necessary, as noted in Iguchi (see [0017])

Regarding claim 2, Tsuda discloses the developer container of claim 1, wherein the container main body is provided with a discharge hole for discharging the developer, and the conveying means conveys the developer in the axial direction of the container main body toward the discharge hole while oscillating the developer by rotating the container main body. See [0024].

Regarding claim 3, Tsuda discloses the developer container of claim 1 wherein the conveying portions are formed so as to meander in a substantially S-shape. See figure 1.

Regarding claim 4, and claims 5-7 depending therefrom, Tsuda discloses the developer container of claim 1, wherein the container main body is provided with a

discharge hole for discharging the developer, and the conveying portions are formed so that the conveying amount of the developer by a conveying portion formed in a close portion to the discharge hole becomes larger than the conveying amount of the developer by a conveying portion formed in a distant portion from the discharge hole. See [0022] and [0027].

Regarding claim 5, Tsuda discloses the developer container of claim 4, wherein the conveying portions are formed so that the conveying portions formed in a close portion to the discharge hole proceed in the axial direction in the longer distance as proceeding in the circumferential direction in comparison with the conveying portion formed in the distant portion from the discharge hole. See [0027].

Regarding claim 6, Tsuda discloses he developer container of claim 4, wherein the conveying portions are formed so that the conveying portion formed in the close portion to the discharge hole have a larger size in an extending direction in comparison with the conveying portion formed in the distant portion from the discharge hole. See [0027].

Regarding claim 7, Tsuda discloses the developer container of claim 4, wherein the conveying portions are formed so as to protrude inward in a radial direction, and the conveying portion formed in the close portion to the discharge hole is formed so as to have a larger protruding amount inward (6) in the radial direction in comparison with the conveying portion formed in the distant portion from the discharge hole. See [0027].

Regarding claim 8, Tsuda discloses an image forming apparatus in which the developer container of claim 1 is detachably mounted. See [0033].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey T. Evans whose telephone number is (571) 272 2369. The examiner can normally be reached on 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on (571) 272 2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GTE

DAVID M. GRAY
SUPERVISORY PATENT EXAMINER